

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address COMMISSIONER FOR PATENTS PO Box 1450 Alexandria, Virginia 22313-1450 www.unpto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/693,022	10/23/2003	Vladimir Bulovic	MIT-PT10301	1746
3624 7590 11/10/2010 VOLPE AND KOENIG, P.C. UNITED PLAZA 30 SOUTH 17TH STREET			EXAMINER	
			BODDIE, WILLIAM	
PHILADELPH			ART UNIT	PAPER NUMBER
			2629	
			NOTE TO LETTER T	DET HERMA CORE
			NOTIFICATION DATE	DELIVERY MODE
			11/10/2010	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

eoffice@volpe-koenig.com hrivera@volpe-koenig.com

Application No. Applicant(s) 10/693.022 BULOVIC ET AL. Office Action Summary Examiner Art Unit WILLIAM L. BODDIE 2629 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS. WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filed on 30 August 2010. 2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 1.7.8.12-14.16-18.20.21 and 29-49 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) _____ is/are allowed. 6) Claim(s) 1, 7-8, 12-14, 16-18, 20-21 and 29-49 is/are rejected. 7) Claim(s) _____ is/are objected to. 8) Claim(s) _____ are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are; a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abevance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)

Paper No(s)/Mail Date

Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO/SB/08)

Paper No(s)/Mail Date.

6) Other:

5) Notice of informal Patent Application

Page 2

Application/Control Number: 10/693,022

Art Unit: 2629

DETAILED ACTION

In an amendment dated, August 30th, 2010, the Applicant amended claims 1, 14, 29, 33, 36, 39 and added new claims 44-49. Currently claims 1, 7-8, 12-14, 16-18, 20-21 and 29-49 are pending.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on August 30th, 2010 has been entered.

Response to Arguments

Applicant's arguments with respect to claims 1, 7-8, 12-14, 16-18, 20-21 and 29 have been considered but are moot in view of the new ground(s) of rejection.

Claim Objections

- 4. Claim 1 is objected to because of the following informalities: line 4 states in part "the plurality of light emitting device and." It appears the Applicant intended this to read "the plurality of light emitting devices and." Appropriate correction is required.
- 5. Claim 16 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 16 states the

Art Unit: 2629

photodetector is formed on the side surface of the substrate. This is in contradiction to claim 14, which claim 16 is dependent upon which states the photodetector is formed on the lower surface of the substrate. It would seem impossible for the photodetector to be formed on both the side and lower surface at once.

Claim Rejections - 35 USC § 103

- The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- Claims 1, 7-8, 12-14, 16-17, 20, 29-38 and 43-48 are rejected under 35 U.S.C.
 103(a) as being unpatentable over Yu et al. (US 7,385,572) in view of Yuyama et al. (US 6,069,676).

With respect to claim 1, Yu discloses, an array (fig. 4), comprising:

a plurality of light emitting devices (700 in fig. 7) disposed on a transparent substrate (705 in fig. 7), the transparent substrate having an upper surface that contacts each light emitting device (fig. 7), a lower surface distal from the plurality of light emitting device and a plurality of side surfaces, each of the side surfaces being substantially perpendicular to the upper surface (fig. 7),

wherein each of the plurality of light emitting devices is individually addressed to display an image (col. 4, lines 50-62, for example); and

at least one photodetector (72 in fig. 7) arranged at the upper of the transparent substrate for detecting a fraction of waveguided light emitted from the plurality of light

Art Unit: 2629

emitting devices, wherein another fraction of waveguided light is edge emitted (col. 12, lines 16-28; note that the figure 7 embodiment has only a single photodetector along a single side of the substrate. Light propagating towards other sides of the substrate will not be detected and will be edge emitted. Note Yu's express discussion of including additional photodetectors to detect all of the light emitted by a pixel (col. 13, lines 12-23)).

Yu does not expressly disclose arranging the photodetector on the lower surface of the transparent substrate.

Yuyama discloses, an array, comprising:

a plurality of light emitting devices (2a-c in fig. 11) disposed under a transparent substrate (4 in fig. 11); and

at least one photodetector (10 in fig. 11) arranged on an opposite surface of the transparent substrate (clear from fig. 11) for detecting light emitted through the substrate from the light emitting devices.

Yuyama and Yu are analogous art because they are both from the same field of endeavor namely, detecting light emitted by LEDs and compensating the driving of the LEDs based on the detected light.

At the time of the invention it would have been obvious to one or ordinary skill in the art to locate the photosensors of Hack on the lower surface (bottom of 210 in fig. 2) of the transparent substrate of Yu, as taught by Yuyama.

The motivation for doing so would have been to avoid obstructing the exiting light (Yuvama: col. 6. lines 32-35).

Application/Control Number: 10/693,022 Art Unit: 2629

With respect to claim 7, Yu and Yuyama disclose, the array of claim 1 (see above).

Yu further discloses, locating a photodetector over the outer periphery edges of the upper surface (beyond 506 in fig. 7; col. 14, lines 37-39).

At the time of the invention it would have been obvious to one of ordinary skill in the art to also include a photodetector over the outer periphery edges of the upper surface as taught by Yu.

The motivation for doing so would have been to achieve a more accurate feedback detection signal (Yu; col. 12, lines 12-23).

With respect to claim 8, Yu and Yuyama disclose, the array of claim 1 (see above).

Yu further discloses, a feedback circuit (fig. 15) that measures a brightness level for each of the plurality of light emitting devices (col. 19, lines 1-16, for example) and varies a voltage applied to individual ones of the light emitting devise to maintain a brightness level of each of the light emitting devices at a substantially constant level (col. 19, lines 17-34, for example).

With respect to claim 12, Yu and Yuyama disclose, the array of claim 8 (see above).

Yu further discloses, wherein the feedback circuit (5 in fig. 1) includes a compensation factor generator (1522-1526 in fig. 15) for generating a compensation factor for each of the plurality of light emitting devices (col. 19, lines 1-16) and a

Art Unit: 2629

memory array for storing the compensation factor for each of the plurality of light emitting devices (memory in fig. 15).

With respect to claim 13, Yu and Yuyama disclose, the array of claim 1 (see above).

Yu further discloses, a display (col. 2, lines 9-10, for example) comprising an array of light emitting devices.

With respect to claim 14, Yu discloses, a method for forming an array, comprising:

forming a plurality of light emitting devices (700 in fig. 7) disposed on a transparent substrate (705 in fig. 7), said transparent substrate having an upper surface contacting the light emitting devices (fig. 7), a lower surface distal from the light emitting devices and at least one side surface substantially perpendicular to said upper surface of the substrate (fig. 7), wherein each of the plurality of light emitting devices is individually addressed to display an image (col. 4, lines 50-62, for example); and

forming a photodetector (72 in fig. 7) at the upper surface of the transparent substrate for detecting a fraction of waveguided light emitted through the transparent substrate,, wherein another fraction of waveguided light is edge emitted (col. 12, lines 16-28; note that the figure 7 embodiment has only a single photodetector along a single side of the substrate. Light propagating towards other sides of the substrate will not be detected and will be edge emitted. Note Yu's express discussion of including additional photodetectors to detect all of the light emitted by a pixel (col. 13, lines 12-23)).

Art Unit: 2629

Yu does not expressly disclose that the at least one photodetector is arranged on the lower surface of the transparent substrate.

Yuyama discloses, a method for forming an array, comprising:

forming a plurality of light emitting devices (2a-c in fig. 11) disposed under a transparent substrate (4 in fig. 11); and

forming at least one photodetector (10 in fig. 11) arranged on an opposite surface of the transparent substrate (clear from fig. 11) for detecting light emitted through the substrate from the light emitting devices.

At the time of the invention it would have been obvious to one or ordinary skill in the art to locate the photosensors of Yu on the lower surface (top of 10 in fig. 3b) of the transparent substrate of Yu, as taught by Yuyama.

The motivation for doing so would have been to avoid obstructing the exiting light (Yuyama; col. 6, lines 32-35).

With respect to claim 16, Yu and Yuyama disclose, the method of claim 14 (see above).

Yu further discloses, forming the photodetector on the side surface of the substrate (62 in fig. 6).

With respect to claim 17, Yu and Yuyama disclose, the method of claim 14 (see above).

Yu further discloses, wherein the photodetector includes a plurality of photodetectors (col. 14, lines 37-39).

Art Unit: 2629

With respect to claim 20, claim 20 is seen as sufficiently equivalent to claim 8.

As such claim 20 is rejected on the same merits shown above in claim 8.

With respect to claim 29, Yu discloses, an array (fig. 4, for example), comprising:

a plurality of light emitting devices (700 in fig. 7) formed on a surface of a transparent substrate (74 in fig. 7) the transparent substrate having an upper surface that contacts the light emitting device, a lower surface distal from the light emitting device and a plurality of side surfaces (fig. 7),

wherein each of the plurality of light emitting devices is individually addressed to display an image (col. 4, lines 50-62, for example); and

at least two photodetectors (72 in fig. 7; col. 14, lines 37-39) arranged on a surface of the transparent substrate for detecting a fraction of waveguided light emitted from the plurality of light emitting devices (clear from fig. 7) wherein another fraction of waveguided light is edge emitted (col. 12, lines 16-28; note that the figure 7 embodiment has only a single photodetector along a single side of the substrate. Light propagating towards other sides of the substrate will not be detected and will be edge emitted. Note Yu's express discussion of including additional photodetectors to detect all of the light emitted by a pixel (col. 13, lines 12-23)).

Yu does not expressly disclose, wherein the photodetector is arranged on an opposite surface of the transparent substrate.

Yuyama discloses, an array, comprising:

Art Unit: 2629

a plurality of light emitting devices (2a-c in fig. 11) disposed under a transparent substrate (4 in fig. 11); and

at least two photodetectors (10a-b in fig. 8 and 10 in fig. 11) arranged on an opposite surface of the transparent substrate (clear from fig. 11) for detecting light emitted through the substrate from the light emitting devices.

Yuyama and Yu are analogous art because they are both from the same field of endeavor namely, detecting light emitted by LEDs and compensating the driving of the LEDs based on the detected light.

At the time of the invention it would have been obvious to one or ordinary skill in the art to locate one of the photosensors of Yu on the opposite surface (top of 10 in fig. 4) of the transparent substrate of Yu, as taught by Yuyama.

The motivation for doing so would have been to avoid obstructing the exiting light (Yuyama; col. 6, lines 32-35).

With respect to claim 30, Yu and Yuyama disclose, the array of claim 29 (see above).

Henmi further discloses, at least one additional photodetector formed over the outer periphery edges of the surface of the transparent substrate (beyond 506 in fig. 7; col. 14, lines 37-39).

With respect to claim 31, Yu and Yuyama disclose, the array of claim 29 (see above).

Yu further discloses, a feedback circuit (fig. 15) that measures a brightness level for each of the plurality of light emitting devices, and varies a voltage applied to

Art Unit: 2629

individual ones of the light emitting devices to maintain a brightness level of each of the light emitting devices at a substantially constant level (col. 19. lines 1-34).

With respect to claim 32, Yu and Yuyama disclose, the array of claim 31 (see above).

Yu further discloses, wherein the feedback circuit (5 in fig. 1) includes a compensation factor generator (1522-1526 in fig. 15) for generating a compensation factor for each of the plurality of light emitting devices (col. 19, lines 1-16) and a memory array for storing the compensation factor for each of the plurality of light emitting devices (memory in fig. 15).

With respect to claim 33, Yu discloses an array (fig. 4; for example), comprising:

a plurality of light emitting devices (700 in fig. 7) disposed over a substrate (74 in fig. 7) having an upper surface that contacts each of the light emitting devices, a lower surface distal from the light emitting device and a plurality of side surfaces (fig. 7).

wherein each of the plurality of light emitting devices is individually addressed to display an image (col. 4, lines 50-62, for example); and

and a photodetector (72 in fig. 7) that detects a fraction of waveguided light emitted through the substrate from the plurality of light emitting devices (clear from fig. 7) and wherein another fraction of waveguided light is emitted at the edge of the substrate (col. 12, lines 16-28; note that the figure 7 embodiment has only a single photodetector along a single side of the substrate. Light propagating towards other sides of the substrate will not be detected and will be edge emitted. Note Yu's express

Art Unit: 2629

discussion of including additional photodetectors to detect all of the light emitted by a pixel (col. 13, lines 12-23)).

wherein at least one light emitting device comprises an OLED (col. 1, line 14), wherein the photodetector is positioned on the upper surface (fig. 7).

Yuyama discloses, an array, comprising:

a plurality of light emitting devices (2a-c in fig. 11) disposed under a transparent substrate (4 in fig. 11); and

at least one photodetector (10 in fig. 11) arranged on an opposite surface of the transparent substrate (clear from fig. 11) for detecting light emitted through the substrate from the light emitting devices.

Yuyama and Yu are analogous art because they are both from the same field of endeavor namely, detecting light emitted by LEDs and compensating the driving of the LEDs based on the detected light.

At the time of the invention it would have been obvious to one or ordinary skill in the art to locate one of the photosensors of Yu on the opposite surface (top of 10 in fig. 4) of the transparent substrate of Yu, as taught by Yuyama.

The motivation for doing so would have been to avoid obstructing the exiting light (Yuyama; col. 6, lines 32-35).

With respect to claim 34, Yu discloses, the array of claim 33 (see above).

Yu further discloses, a feedback circuit (fig. 15) that measures a brightness level for each of the plurality of light emitting devices (col. 19, lines 1-16) and varies a voltage applied independently to individual ones of the light emitting devise to maintain a

Art Unit: 2629

brightness level of each of the light emitting devices at a substantially constant level (col. 19, lines 1-34).

With respect to claim 35, Yu and Yuyama disclose, the array of claim 34 (see above).

Yu further discloses, wherein the feedback circuit (5 in fig. 1) includes a compensation factor generator (1522-1526 in fig. 15) for generating a compensation factor for each of the plurality of light emitting devices (col. 19, lines 1-16) and a memory array for storing the compensation factor for each of the plurality of light emitting devices (memory in fig. 15).

With respect to claim 36, Yu discloses an array (fig. 4; for example), comprising:

a plurality of light emitting devices (700 in fig. 7) disposed over a substrate (74 in fig. 7) having an upper surface that contacts each of the light emitting devices (clear in fig.7), a lower surface distal from the plurality of light emitting devices and a plurality of side surfaces (fig. 7), and

wherein each of the plurality of light emitting devices is individually addressed to display an image (col. 4, lines 50-62, for example); and

and a photodetector (72 in fig. 7) that detects a fraction of waveguided light emitted through the substrate from the plurality of light emitting devices (clear from fig. 7) and wherein another fraction of waveguided light is emitted at the edge of the substrate (col. 12, lines 16-28; note that the figure 7 embodiment has only a single photodetector along a single side of the substrate. Light propagating towards other

Art Unit: 2629

sides of the substrate will not be detected and will be edge emitted. Note Yu's express discussion of including additional photodetectors to detect all of the light emitted by a pixel (col. 13, lines 12-23)),

wherein at least one light emitting device comprises a PLED (col. 1, lines 13-14), wherein the photodetector is positioned on the upper surface (fig. 7).

Yu does not expressly disclose, wherein the photodetector is on the lower surface, i.e., arranged on an opposite surface of the transparent substrate.

Yuyama discloses, an array, comprising:

a plurality of light emitting devices (2a-c in fig. 11) disposed under a transparent substrate (4 in fig. 11); and

at least one photodetector (10 in fig. 11) arranged on an opposite surface of the transparent substrate (clear from fig. 11) for detecting light emitted through the substrate from the light emitting devices.

Yuyama and Yu are analogous art because they are both from the same field of endeavor namely, detecting light emitted by LEDs and compensating the driving of the LEDs based on the detected light.

At the time of the invention it would have been obvious to one or ordinary skill in the art to locate one of the photosensors of Yu on the opposite surface (top of 10 in fig. 4) of the transparent substrate of Yu, as taught by Yuyama.

The motivation for doing so would have been to avoid obstructing the exiting light (Yuyama; col. 6, lines 32-35).

Art Unit: 2629

With respect to claim 37, Yu and Yuyama disclose, the array of claim 36 (see above).

Yu further discloses, wherein the feedback circuit (5 in fig. 1) includes a compensation factor generator (1522-1526 in fig. 15) for generating a compensation factor for each of the plurality of light emitting devices (col. 19, lines 1-16) and a memory array for storing the compensation factor for each of the plurality of light emitting devices (memory in fig. 15).

With respect to claim 38, Yu and Yuyama disclose, the array of claim 37 (see above).

Yu further discloses, wherein the feedback circuit (5 in fig. 1) includes a compensation factor generator (1522-1526 in fig. 15) for generating a compensation factor for each of the plurality of light emitting devices (col. 19, lines 1-16) and a memory array for storing the compensation factor for each of the plurality of light emitting devices (memory in fig. 15).

With respect to claim 43, Yu and Yuyama disclose, the array of claim 8 (see above).

Yu further discloses, a feedback circuit (fig. 15) that measures a brightness level for each of the plurality of light emitting devices (col. 19, lines 1-16) and varies a voltage applied independently to individual ones of the light emitting devise to maintain a brightness level of each of the light emitting devices at a substantially constant level (col. 19, lines 1-34).

Art Unit: 2629

With respect to claims 44-48, Yu and Yuyama disclose, the arrays and methods of claims 1, 14, 29, 33, and 36 (see above).

Yu further discloses, wherein each of the plurality of light emitting devices is selectively activated to display the image (col. 4, lines 50-63, for example).

Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yu et al.
 (US 7,385,572) in view of Yuyama et al. (US 6,069,676) and further in view of Cok (US 7,026,597).

With respect to claim 18, Yu and Yuyama discloses, the method of claim 17 (see above).

Yu further discloses, that photodetectors are formed on the side surfaces (62 in fig. 6).

Neither Yuyama nor Yu expressly disclose, that the photo detectors are formed on each side surface.

Cok discloses, forming photodetectors on each edge of a display (20 in fig. 5).

Cok, Yuyama and Yu are analogous art because they are from the same field of endeavor namely, placement of photodetectors within a display.

At the time of the invention it would have been obvious to one of ordinary skill in the art to include photodetectors along each side as taught by Cok in the display of Yuyama and Yu.

The motivation for doing so would have been improved illumination detection (Cok; col. 1, lines 65-67).

Application/Control Number: 10/693,022 Art Unit: 2629

 Claims 39-42 and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yu et al. (US 7,385,572) in view of Yuyama et al. (US 6,069,676) and further in view of Bawendi et al. (US 6,501,091).

With respect to claim 39, Yu discloses an array (fig. 4; for example), comprising:

a plurality of light emitting devices (700 in fig. 7) disposed over a substrate (74 in fig. 7) having an upper surface that contacts each of the light emitting devices (clear in fig.7), a lower surface distal from the plurality of light emitting devices and a plurality of side surfaces (fig. 7), and

wherein each of the plurality of light emitting devices is individually addressed to display an image (col. 4, lines 50-62, for example); and

and a photodetector (72 in fig. 7) that detects a fraction of waveguided light emitted through the substrate from the plurality of light emitting devices (clear from fig. 7) and wherein another fraction of waveguided light is emitted at the edge of the substrate (col. 12, lines 16-28; note that the figure 7 embodiment has only a single photodetector along a single side of the substrate. Light propagating towards other sides of the substrate will not be detected and will be edge emitted. Note Yu's express discussion of including additional photodetectors to detect all of the light emitted by a pixel (col. 13, lines 12-23)),

wherein at least one light emitting device comprises a PLED (col. 1, lines 13-14), wherein the photodetector is positioned on the upper surface (fig. 7).

Art Unit: 2629

Yu does not expressly disclose, wherein the photodetector is on the lower surface, i.e., arranged on an opposite surface of the transparent substrate.

Yuyama discloses, an array, comprising:

a plurality of light emitting devices (2a-c in fig. 11) disposed under a transparent substrate (4 in fig. 11); and

at least one photodetector (10 in fig. 11) arranged on an opposite surface of the transparent substrate (clear from fig. 11) for detecting light emitted through the substrate from the light emitting devices.

Yuyama and Yu are analogous art because they are both from the same field of endeavor namely, detecting light emitted by LEDs and compensating the driving of the LEDs based on the detected light.

At the time of the invention it would have been obvious to one or ordinary skill in the art to locate one of the photosensors of Yu on the opposite surface (top of 10 in fig. 4) of the transparent substrate of Yu, as taught by Yuyama.

The motivation for doing so would have been to avoid obstructing the exiting light (Yuyama; col. 6, lines 32-35).

Neither Yuyama nor Henmi expressly disclose a QDLED.

Henmi does not expressly disclose a QDLED.

Bawendi discloses a QDLED display (title).

Bawendi and Henmi are analogous art because they are both from the same field of endeavor namely, high quality LED based displays.

Art Unit: 2629

At the time of the invention it would have been obvious to replace the OLED devices of Henmi with the QDLED elements of Bawendi.

The motivation for doing so would have been the availability of additional color choices (Bawendi: col. 1, lines 35-53).

With respect to claim 40, Yu, Yuyama and Bawendi disclose, the array of claim 39 (see above).

Yu further discloses, wherein the feedback circuit (5 in fig. 1) includes a compensation factor generator (1522-1526 in fig. 15) for generating a compensation factor for each of the plurality of light emitting devices (col. 19, lines 1-16) and a memory array for storing the compensation factor for each of the plurality of light emitting devices (memory in fig. 15).

With respect to claim 41, Yu, Yuyama and Bawendi disclose, the array of claim 40 (see above).

Yu further discloses, wherein the feedback circuit (5 in fig. 1) includes a compensation factor generator (1522-1526 in fig. 15) for generating a compensation factor for each of the plurality of light emitting devices (col. 19, lines 1-16) and a memory array for storing the compensation factor for each of the plurality of light emitting devices (memory in fig. 15).

With respect to claim 42, Yu, when combined with Bawendi and Yuyama, discloses a display (Yu; col. 2, lines 9-10) comprising the array of claim 39 (see above).

With respect to claim 49, Yu and Yuyama disclose, the array of claim 39 (see above).

Art Unit: 2629

Yu further discloses, wherein each of the plurality of light emitting devices is selectively activated to display the image (col. 4. lines 50-63, for example).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hack et al. (US 7,053,412) discloses a photodetector located alongside an OLED see figure 2.

Any inquiry concerning this communication or earlier communications from the
examiner should be directed to WILLIAM L. BODDIE whose telephone number is
(571)272-0666. The examiner can normally be reached on Monday through Friday,
7:30 - 4:30 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz can be reached on (571) 272-3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Application/Control Number: 10/693,022 Art Unit: 2629

/William L Boddie/ Examiner, Art Unit 2629 11/8/10